ABSTRACT

One of the problems in the field of animal husbandry in particular is how to detect eggs that have good and bad quality. In some cases of egg sorting, the method often used today is to use sunlight or put it in water. Based on these problems, a tool was made to detect an egg's condition automatically using an HPL LED beam and an LDR sensor. This tool was built using Arduino, Servo Motor, 1Kg Weight Sensor, LED Indicator, LCD, I2C Module, HPL LED and LDR Sensor. HPL LEDs are used to illuminate the egg so that it can emit translucent light intensity to be read by the LDR sensor. Based on the tests that have been done, this tool can read the value of translucent light intensity on the egg and determine the condition of the egg in good or bad condition, when the egg is in good condition then this tool will direct the egg to enter the egg container well as well as the condition of the egg bad.

Keywords: Egg, Sort System, Weight Sensor, Arduino, HPL LED.